



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,432	10/23/2003	Dotan Sokolov	P-5360-US1	2138
27130	7590	09/16/2005	EXAMINER	
EITAN, PEARL, LATZER & COHEN ZEDEK LLP 10 ROCKEFELLER PLAZA, SUITE 1001 NEW YORK, NY 10020			TRAN, KHAI	
			ART UNIT	PAPER NUMBER
			2637	

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

Office Action Summary	Application No. 10/691,432	Applicant(s) SOKOLOV ET AL.	
	Examiner KHAI TRAN	Art Unit 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☒ Claim(s) 6-23 is/are allowed.
 6) ☒ Claim(s) 1,3-5,24,26,28,34,35,37-39,41,42,44 and 46 is/are rejected.
 7) ☒ Claim(s) 2,25,27,29-33,36,40,43,45,47 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/23/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The preliminary amendment filed 10/23/2003 has been entered. Claims 1-47 are pending in this Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1, 3, 4, 5, 24, 26, 28, 34-35, 37, 38, 39, 41, 42, 44, 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura (U.S. Pat. 5,216,693) in view of Menk et al (U.S. Pat. 5,251,238).

Regarding claim 1, Nakamura discloses a cellular telephony searcher, comprising: a plurality of correlators for correlating a received signal with a pseudo-noise sequence (see Figures 12 shows correlators 52, 53, and Fig. 13(b) discloses PN

code generator 63 for generating PN code sequence); an input mechanism for inputting the pseudo-noise sequence into the correlators, each of the correlators receiving the pseudo-noise sequence with a different delay (a shift register 64 (or a delay circuit for delaying the PN code sequence). Nakamura also discloses a delay line also called as a shift register 64, but Nakamura fails to disclose a delay management mechanism for initializing the delays and subsequently changing the delays, the changing being contingent, for each the correlator, only on an output of the each correlator.

Menk et al disclose a logic circuit (13, 55, or 73) connected to the correlation output signals for evaluating the correlation output signals and generating a control signal which represents the middle of the eye opening between the digital signal and the synchronized digital from the logic circuit (see Menk et al, claim 1), and the logic circuit 55 for carrying out a correlation of the sampled signals and an evaluation of the correlation results or correlation functions for adjustment of sampling to the center of an eye (col. 6, lines 8-45). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust or change the delay signal based on the result of the correlation as taught by Menk et al into the teachings of Nakamura in order to correlate the adjacent signals with each other (col. 5, line 66 to col. 6, line 25) and obtain an optimal sampling time.

Regarding claims 4-5, Nakamura discloses a pseudo-noise sequence 63; a delay line 64; for each the correlator, an index register (See Fig. 13(b)); a multiplexer (66) for directing one of the copies of the pseudo-noise sequence to each the correlator in accordance with an index value stored in the index register of the each correlator.

Regarding claim 24, claim 24 is similar to claim 1, and Menk et al further disclose a next location unit (a logic circuit 13 to decide to change at least the first delay of the first correlator based, at least in part, on an output of the first correlator.

Regarding claims 3, 26, Menk et al disclose wherein the next location unit is to decide to change at least the first delay by comparing an estimated absolute value of the output of the first correlator to a threshold (see Mark et al, claim 1, and col.5, line 66 to col. 6, line 25).

Claim 28 is similar to claims 1, 24. Therefore, claim 28 is rejected under a similar rationale.

Claims 34-35, 37 are similar to claims 1, 24. Nakamura also discloses a spread spectrum communications system. Therefore, a use of mobile station is well known in the spread spectrum communication system for communicating with a base station.

Claims 38, 39, 41 are similar to claims 1, 3, 24, 26, 34. Nakamura further discloses a receiving signal 13(b) transmitted from a transmitter. Therefore, a use of the antenna of a receiver for receiving signal from the transmitter is well known in the spread spectrum communication system.

Claims 42, 44, 46 are similar to claims 24, 26. Therefore, claims 42, 44, 46 are rejected under a similar rationale.

Allowable Subject Matter

5. Claims 6-23 are allowed.

Art Unit: 2637

6. Claims 2, 25, 27, 29-33, 36, 40, 43, 45, 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Nakamura and Menk et al fail to disclose simultaneously performing a plurality of initial correlations of the received signal with the pseudo-noise sequence, each of the initial correlations being performed with a different initial delay of the pseudo-noise for first dwell time to produce, for each of the initial correlations, and initial first dwell time correlation value; wherein at least one correlator of said at least first and second correlators is able to correlate the received signal within a correlation time selected from a group consisting of a first dwell time, and a sum of the first dwell time and a second dwell time.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wagner et al (U.S. Pat. 5,157,408) disclose a radio system.

Fenton et al (U.S. Pat. 5,495,499) disclose a receiver.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAIR TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KHAI TRAN
Primary Examiner
Art Unit 2637

KT
September 14, 2005